

2.
**Survey of Diabetes
Community Education and
Screening Programs
Offered through Local
Health Departments
in Indiana**

EXECUTIVE SUMMARY

Survey results indicated one-third (n=37) of the health departments in the state offer diabetes education and screening programs to community members. Twenty-six health departments not offering a community diabetes/education screening program at the time of the survey indicated another organization in their area offered the service. Although demographic reporting is incomplete, results indicate the at-risk Black and Hispanic populations are not successfully being targeted. Written guidelines for conducting community screening programs should be available in all health departments. Results indicate only 13 of the 30 local health departments that offer diabetes screening have/follow written guidelines for conducting community diabetes screening programs. State law authorizes local health department to provide insulin to needy citizens at no charge through a process based on the "Application for Insulin and Township Claim." Despite the availability of this program, almost half of the health departments indicated they did not have any person in their jurisdiction receive insulin through this program in the preceding twelve months.

DATA HIGHLIGHTS

- All 94 of Indiana's local health departments (91 county and 3 city) responded to the survey.
- Results indicate some type of a diabetes education/screening program is being offered in over two-thirds (n=63; 67%) of Indiana's local health department catchment areas, either through the local health department, by some other organization in the area, or through a cooperative effort between the local health department and a community agency.
- Approximately one-third (n=37/94) of Indiana's local health departments offer diabetes education programs to members of their community; 30 (32%) health departments offer diabetes screening tests.
- Forty-three (46%) health departments listed at least one other organization in their community that offers diabetes education/screening, with the hospital as the most prevalent source (n=43).
- Approximately one-half of the health departments that provide diabetes programs (n=18/37) estimated they devote less than five hours a month to this endeavor.
- Over one-half of the health departments with diabetes programs target family members of persons with diabetes (n=19/36); three-fourths target males and females over 65 years of age (n=28/36).
- Only 21 of the 37 (57%) health departments that offer diabetes programs supplied the requested information on race/ethnicity; only 20 could provide age group information. Although the demographic reporting is incomplete, data suggest the population served is primarily the white, non-Hispanic, female over age 65.

- The length of each education/screening session offered by local health department varied, with the majority lasting one to two hours (30%) or three to four hours (27%) in duration.
- Nurses are the primary instructors for the diabetes programs (97%), although one health department indicated a dietitian serves in this role. Only one of the primary instructors was reported to be a certified diabetes educator.

Most educational programs cover diabetes symptoms (87%), complications (84%), risk factors (78%), nutrition (76%) and self-glucose monitoring (73%). Other topics included exercise (68%), foot care (65%), self-medication (62%), eye care (51%), terminology (49%), oral health (43%), and psychosocial aspects of diabetes (41%). Gestational diabetes is covered in 19% of the programs.

- The most widely used educational tools are brochures and pamphlets obtained from the American Diabetes Association (92%).
- Most of the educational encounters take place within the health department (n=27; 73%). Other major settings include community organizations (49%), homes (35%), and hospitals or clinics (30%).
- Newspapers (70%) and health fairs (43%) are the two most common methods of advertising used to inform the target population about diabetes education and screening programs.
- Thirty of the 37 (82%) health departments that provide diabetes education also offer diabetes screening. Of those programs that offer diabetes screening, only nine (24%) use a verbal or written questionnaire to determine who is "at risk."
- The most commonly specified test used to screen for diabetes is a random plasma glucose test (n=19; 63%). Two health departments (7%) reported using a fasting blood glucose. Only one health department reported using the hemoglobin A1c test.
- Only three of the 30 (10%) health departments that offer blood glucose testing charged a fee for the service; of these, two charged a \$2.00 fee and one charged \$1.00.
- All of the health departments that offer diabetes screening reported they make some provision for follow-up services for persons who test presumptively positive for diabetes; most of these referrals are made to the person's own family doctor (n=29; 97%).
- Written guidelines for conducting community screening programs are available in only 13 of the 30 (43%) health departments that offer diabetes screening.
- All responding health departments (n=94), regardless of whether or not they offer an education/screening program, indicated a need for guidance/instruction about issues specific to diabetes (n=35; 37%), diabetes screening practices (n=35; 37%), and referral sources (n=23; 25%).

- Specific requests for educational assistance included nutrition management (n=34; 97%), understanding the different types of diabetes (n=30; 86%), insulin use (n=29; 83%), complications of the disease (n=28; 80%), and glucose self-monitoring (n=26; 74%).
- Indiana Code 16-41-19 authorizes the provision of insulin through a process based on the "Application for Insulin and Township Claim." Within the last year, 42 of the 94 (45%) health departments approved less than five applications, two (2%) provided insulin to six to ten persons, 10 (11%) provided none, and 39 (41%) either did not know or did not respond. One health department reported providing insulin to 25 persons.

RECOMMENDATIONS

Based on the results of this survey, the following recommendations are made:

- More county health departments should be encouraged to sponsor/implement a diabetes education/screening program, either through their own facility or in cooperation with some other community-based organization in the area.
- All health departments should take steps to target the highest-risk population in their catchment area, with a special effort made toward reaching Hispanic and Black citizens.
- All local health departments, regardless of whether or not a diabetes education/screening program is offered, should know how to access free insulin for needy citizens through the "Application for Insulin and Township Claim."
- All local health departments should have current written guidelines for conducting a community-based diabetes screening program. The Diabetes Control Program will send model guidelines to each local health department once they have been developed..
- All local health departments should be provided with current information addressing the needs expressed by the respondents, beginning with information that can help both the instructor as well as the person with diabetes and their family members, understand the relationship between nutrition and diabetes control.

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Survey of Diabetes Community Education and Screening Programs Offered Through Local Health Departments in Indiana

INTRODUCTION

In June of 1994, the Indiana State Department of Health (ISDH) was awarded a grant from the Centers for Disease Control and Prevention (CDC) to develop and implement a statewide diabetes control program. A major objective of this program is to ensure that patient education for the self-management of diabetes is a basic component of treatment, allowing persons with diabetes to maintain glycemic control and prevent complications of the disease. Another objective of the diabetes control program is to identify individuals who do not know they have diabetes and who are not under medical care. The American Diabetes Association estimates there are as many persons with undiagnosed diabetes as there are individuals with diagnosed diabetes.

To identify current efforts in diabetes education and screening at the community level, a series of statewide surveys were conducted during 1995. This report summarizes results obtained from the 94 local Indiana health departments (91 county and three city). A report that examines patient education and community education practices of the 121 acute care hospitals in Indiana was published in August of 1995.

This report is organized in three sections. The first section (Tables 1-6) describes results reported by all local health departments, whether or not they offer a diabetes education and screening program. The second section describes responses to questions by the 37 health departments that offered a diabetes education program at the time of this survey (Tables 7-18). The third section focuses on the 30 departments that offer *both* diabetes screening and diabetes education programs (Tables 19-23).

METHODOLOGY

In July of 1995, the 94 local health departments in Indiana (91 county and 3 city) were sent a survey to identify current efforts in diabetes education and screening at the community level (Appendix A). The survey contained twenty-four questions. By September, seventy-five (80%) of the local health departments responded. Follow up letters were sent to the nineteen health departments that did not respond. Subsequently, eight more surveys were returned, resulting in a total of eighty-three (88%) completed surveys. Phone calls were made to the remaining eleven health departments. By November, all 94 (100%) of the local health departments returned completed survey forms.

ANALYSIS

Data entry and the initial data analysis was accomplished using Epi Info, v6.0, an epidemiological data management and analysis program developed by the Centers for Disease Control. Further data

management and analysis were conducted using SPSS/PC, v4.0. Statistical analysis was limited to the calculation and tabulation of frequencies and proportions.

RESULTS

Section 1: Results Reported By All Local Health Departments

Thirty-seven (39 %) of the 94 local health departments in Indiana reported offering a community-based education/screening program targeted at individuals with an increased risk for diabetes. More than half (61%) of the local health departments reported they did *not* offer a diabetes education/screening program (Table 1).

Table 1. Number of local health departments in Indiana that offer community diabetes education/screening programs (n=94).

Program	Number	Percent
No	57	60.6
Yes	37	39.4
Total	94	100.0

Catchment Area

The health departments were asked to define their service catchment areas as "city only", "single county", or "multi-county region;" 77 (82%) responded to this question (Table 2). Of those who offer a diabetes program, two-thirds (n=25/37) service the entire county.

Table 2. Service catchment area reported by local health departments in Indiana.

Area	Have Diabetes Program (n=37)		No Diabetes Program (n=57)		Total (n=94)	
	Number	Percent	Number	Percent	Number	Percent
County	25	67.6	39	68.4	64	68.1
City	6	16.2	5	8.8	11	11.7
Multi-County Region	1	2.7	1	1.8	2	2.1
No Response	5	13.5	12	21.1	17	18.1

Other Providers of Diabetes Education/Screening Programs

The health departments were asked to indicate if other facilities/organizations in their area offered community diabetes education/screening programs. Forty-three (46%) of the local health departments answered in the affirmative. Seventeen health departments (40%) reported diabetes programs were offered *both* through the health department and through another facility or organization in their area. "Other facilities/organizations" provided the sole source of diabetes education and screening for 26 (28%) counties. The primary type of facility/organization that offered diabetes education/screening was the local hospital (n=43), followed by community organizations (n=4), clinic/physician (n=3) and "other" (n=8), to include home health agencies, pharmacies, and nursing homes (Table 3).

Table 3. Other organizations offering diabetes education/screening as reported by local health departments in Indiana (n=43).

Organization	Number	Percent
Hospital	43	100.0
Community Organization	4	9.3
Clinic/Physician	3	7.0
Other	8	18.6

Use of the "Application for Insulin and Township Claim"

Indiana law authorizes local health departments to provide insulin to needy citizens through a process based on the "Application for Insulin and Township Claim." During the 12 months preceding the survey, 91 of the 94 (97%) health departments either did not use the program at all (n=10), used it less than five times (n=42), did not know if they used it (n=2), or did not respond to the question (n=37) (Table 4). Only three health departments (3%) used the program six or more times in the preceding year. One of these three health departments reporting providing insulin to 25 individuals.

Table 4. Persons provided insulin by local health departments in the past 12 months.

Number of persons	Have Diabetes Program (n=37)		No Diabetes Program (n=57)		Total (n=94)	
	Number	Percent	Number	Percent	Number	Percent
None	6	16.2	4	7.0	10	10.6
Less than 5	19	51.4	23	40.4	42	44.7
6-10	2	5.4	0	0.0	2	2.1
Other	0	0.0	1	1.8	1	1.1
Don't know	0	0.0	2	3.5	2	2.1
No Response	10	27.0	27	47.4	37	39.4

Education/Guidance Needs

All local health departments were asked to indicate their needs for education and guidance in specific areas related to diabetes education and screening activities (Table 5). Of the 37 local health departments that offer diabetes education and screening, 17 (46%) requested additional subject-specific information, 15 (41%) requested information about diabetes screening practices, and 13 (35%) requested information about referral sources. Of the 57 health departments that do not currently offer a diabetes education and screening program, 20 (35%) indicated an interest in obtaining more information about both diabetes screening practices, and 18 (32%) requested subject-specific information.

Table 5. Guidance/instruction needs reported by local health departments in Indiana.

Subject	Have Diabetes Program (n=37)		No Diabetes Program (n=57)		Total (n=94)	
	Number	Percent	Number	Percent	Number	Percent
Specific Information	17	45.9	18	31.6	35	37.2
Screening Practices	15	40.5	20	35.1	35	37.2
Referrals	13	35.1	10	17.5	23	24.5
Other	7	18.9	1	1.8	8	8.5

Specific Requests for Education/Information

Of the 35 health departments that requested additional subject-specific information, 97% (n=34) indicated their greatest area of need was the relationship between nutrition and diabetes, followed by "types of diabetes" (n=30), "using insulin" (n=29), "complications of diabetes", (n=28) and "self-monitoring" (n=26) (Table 6). Of the 17 health departments that currently offer a diabetes program and indicated a need for subject-specific information, all 17 requested more information about the complex relationship between nutrition and diabetes. Of the 18 health departments that did not offer diabetes classes at the time of the survey, 94% (n=17) were interested in obtaining more information about "types of diabetes," "nutrition," and "using insulin."

Table 6. Needs indicated by local health departments for guidance/instruction in educational methods.

Method	Have Diabetes Program (n=17)		No Diabetes Program (n=18)		Total (n=35)	
	Number	Percent	Number	Percent	Number	Percent
Nutrition	17	100.0	17	94.4	34	97.1
Types of diabetes	13	76.5	17	94.4	30	85.7
Using insulin	12	70.6	17	94.4	29	82.9
Complications	12	70.6	16	88.9	28	80.0
Self-monitoring	13	76.5	13	72.2	26	74.3

Section 2: Results of the 37 Local Health Departments Offering Diabetes Programs

Community Partners

Of the 37 local health departments that offered community-based diabetes programs at the time of the survey, nine (24%) indicated the programs were offered in cooperation with another organization. Cooperating organizations included hospitals, senior centers, Council on Aging, home health care, and a Lions Club.

Monthly Time Commitment

Nearly one-half of the 37 local health departments that offered community-based diabetes education/screening programs estimated they devoted less than five hours per month to these efforts (n=18) (Table 7). Another 38% (n=14) indicated they spent between five to ten hours per month. In contrast, three health departments (8%) reported spending between 16-20 hours, and two departments (5%) reported devoting more than 20 hours per month to community-based diabetes screening/education programs.

Table 7. Number of hours per month devoted by local health departments to community diabetes educational/screening initiatives (n=37).

Hours	Number	Percent
<5	18	48.6
5-10	14	37.8
11-15	0	0.0
16-20	3	8.1
>20	2	5.4

Target Population

Three-quarters (n=28) of the 37 local health departments target their educational programs toward the elderly (Table 8). Sixty-two percent (n=23) target their client-base previously identified as having diabetes. Fifty-one percent (n=19) target their educational messages toward the family members of persons with diabetes. Approximately 30% (n=11) target minorities.

Table 8. Groups targeted by local health departments for diabetes education/screening (n=37).

Group	Number	Percent
Elderly	28	75.7
Clients	23	62.2
Family	19	51.4
Minorities	11	29.8
Other	10	27.0

Race/Ethnicity by Gender

Twenty-one (57%) of the 37 local health departments that offered diabetes education/screening programs were able to provide the race/ethnicity and gender of the persons who attend their programs (Table 9). Sixty-three percent (n=2,183) of the 3,620 individuals who attended local health department programs were female; 35% (n=1,352) were male. Ninety-six percent of the attendees, both male (n=1,304) and female (n=2,183), were White, non-Hispanic. Only 3% of the attendees, both male (n=37) and female (n=85), were Black, non-Hispanic. Despite the increased incidence of diabetes among the Hispanic population, no Hispanics attended local health department diabetes education/screening programs.

Table 9. Race/ethnicity and gender of persons attending local health department diabetes education/screening (Reported by 21 of 37 departments).

Race/Ethnicity	Male	Female	Total	Percent
White (Non-Hispanic)	1,304	2,183	3,487	96.3
Black (Non-Hispanic)	47	85	132	3.7
Hispanic	0	0	0	0.0
Amer. Ind./Pac. Islander	0	0	0	0.0
Other	1	0	1	0.0
Total	1,352	2,268	3,620	100.0

Age Group by Gender

Twenty of the 37 health departments (54%) were able to provide information about the age of individuals who attended the diabetes education/screening programs. Aggregate totals of the numbers reported by these local health departments are shown in Table 10. Although demographic reporting is incomplete, nearly two-thirds of the 2,505 documented individuals receiving diabetes education and screening services were female, and nearly 60 percent (n=1,468) were age 65 and older.

Table 10. Age group and gender of persons attending local health department diabetes education/screening (Reported by 20 of 37 departments).

Age Group	Male	Female	Total	Percent
<18	0	0	0	0.0
19-34	46	83	129	5.2
35-49	115	173	288	11.5
50-64	219	401	620	24.8
65+	484	984	1,468	58.6
Total	864	1,641	2,505	100.0

Length of Educational Sessions

Although the length of the educational sessions varied, Table 11 indicates the majority lasted from either one to two hours (30%; n=11), or three to four hours (54%; n=20), in duration. Approximately one in five programs (19%; n=7) lasted less than one hour, and one in five (19%; n=20) lasted more than four hours.

Table 11. Total hours duration of each education/screening program (n=37).

Hours	Number	Percent
<1	7	18.9
1-2	11	29.7
3-4	10	27.0
>4	7	18.9
No Response	2	5.4
Total	37	100.0

Staffing Patterns

Most of the 37 responding local health departments reported having from one to three full-time and/or part-time instructors conducting the diabetes education/screening program in their county/city (Table 12). Sixty percent (n=15) reporting having one full-time staff member conducting the diabetes education/screening program. One health department reported using twelve volunteer instructors/outreach workers to staff their diabetes program.

Table 12. Number of full-time, part-time, and volunteer instructors/outreach workers (n=37).

No. of staff	Full-Time		Part-Time		Volunteer	
	Depts.	Total	Depts.	Total	Depts.	Total
1	15	15	13	13	1	1
2	4	8	3	6	0	0
3	4	12	4	12	0	0
4	1	4	0	0	0	0
5	1	5	0	0	0	0
12	0	0	0	0	1	12
Total	25	44	20	31	2	13

Staff Qualifications

Nurses are the primary instructors for 36 out of 37 diabetes programs (Table 13). One local health department indicated a dietitian was the primary instructor. No health department reported using health educators or other professionals as primary instructors. Only one of the primary instructors, a nurse, was reported to be a Certified Diabetes Educator.

Table 13. Educational background of primary instructor (n=37).

Background	Number	Percent
Nurse	36	97.3
Dietitian	1	2.7
Health Educator.	0	0.0
Other	0	0.0
Total	37	100.0

Topics Covered in Educational Programs

The four most prevalent topics included in diabetes programs offered throughout Indiana included symptoms (87%), complications (84%), risk factors (78%), nutrition (76%), and glucose self-monitoring (73%) (Table 14). A majority of the programs include discussions about exercise (68%), foot care (65%), self-medication (63%) and eye care (51%). Other topics reported to be covered by less than half of the programs included diabetes terminology (49%), oral health issues (43%), psychosocial aspects of diabetes (41%), and gestational diabetes (19%).

Table 14. Topics included in curriculum (n=37).

Topics	Number	Percent
Symptoms	32	86.5
Complications	31	83.8
Risk Factors	29	78.4
Nutrition	28	75.7
Self-glucose Monitoring	27	73.0
Exercise	25	67.6
Foot Care	24	64.9
Self-medication	23	62.2
Eye Care	19	51.4
Terminology	18	48.6
Oral Health	16	43.2
Psychosocial Aspects	15	40.5
Gestational Diabetes	7	18.9
Other	6	16.2

Types of Educational Tools

Brochures and pamphlets are the most commonly used educational tools (92%), followed by fact sheets (43%) and videos (30%) (Table 15). Other educational tools used by local health departments include books (19%), charts/graphs (14%) and audio-tapes (3%).

Table 15. Educational tools used by local health departments for diabetes education/screening programs (n=37).

Tools	Number	Percent
Brochures/Pamphlets	34	91.9
Fact Sheets	16	43.2
Videos	11	29.7
Books	7	18.9
Charts/Graphics	5	13.5
Tapes	1	2.7
Other	4	10.8

Source of Educational Materials

The American Diabetes Association (ADA) is the most commonly cited source of materials for the diabetes programs conducted by the 37 local health departments (60%; n=22) (Table 16). Other frequently cited sources include materials developed by the local health departments (22%), provided by the Indiana State Department of Health (ISDH) (16%), and supplied by vendors of pharmaceuticals and other products used in care and treatment of diabetes (16%). Two health departments (5%) reported they do *not* furnish clients with educational materials.

Table 16. Sources of educational materials used by local health department sponsored diabetes education/screening programs (n=37).

Source	Number	Percent
ADA	22	59.5
Develop Own	8	21.6
ISDH	6	16.2
Vendors	6	16.2
NIH	2	5.4
None	2	5.4
Other/Unspecified	7	18.9

Educational Settings

Survey results indicated the health department-sponsored programs most often provide the educational sessions in their own facilities (73%). Other settings include various community organizations (49%), individual's homes (35%), and hospitals/clinics (30%). Less commonly chosen sites for diabetes education/screening activities included churches (19%), schools (16%), and worksites (14%).

Table 17. Settings in which the education is provided (n=37).

Setting	Number	Percent
Health Department	27	73.0
Community Org.	18	48.6
Homes	13	35.1
Hospitals/Clinics	11	29.7
Churches	7	18.9
Schools	6	16.2
Worksites	5	13.5
Other	4	10.8

Advertising Methods

Local health departments rely on newspapers (70%) and health fairs (43%) to reach their target populations with information about education/screening programs (Table 18). Approximately one-third of the 37 local health departments used posters (35%), community organizations (38%), or brochures (35%) to advertise their diabetes education/screening program. Nine (24%) health departments reported using public service announcements on radio or television. Other less frequently sources of advertisement included church announcements (n=3), billboards (n=2), minority-targeted media (n=1), or mass mailings (n=1). Bus advertisements and press conferences were not used by any of the 37 reporting local health departments.

Table 18. Advertising methods used to inform target population(s) about diabetes education/screening programs (n=37).

Methods	Number	Percent
Newspapers	26	70.3
Health Fairs	16	43.2
Community Organizations	14	37.8
Posters	13	35.1
Brochures	13	35.1
Radio/TV PSA	9	24.3
Church Announcements	3	8.1
Billboards	2	5.4
Minority-targeted Media	1	2.7
Mailings	1	2.7
Bus Advertisement	0	0.0
Press conferences	0	0.0
None	3	8.1
Other	1	2.7

Section 3: Results of 30 Local Health Departments that Offer Diabetes Screening

As indicated in Table 19, 30 of the 37 (81%) local health departments that provide diabetes education indicated they also offer diabetes screening programs (Appendix B). Only three (8%) of the health departments that offer diabetes education programs do *not* offer diabetes screening.

Table 19. Number of local health departments that offer diabetes screening (n=37).

Screening	Number	Percent
Yes	30	81.1
No	3	8.1
No Response	4	10.8
Total	37	100.0

Identification of "At-Risk" Persons

Of the 30 programs that provide diabetes screening, 9 (30%) use a written or verbal questionnaire to identify persons who are "at risk" for diabetes (Table 20). Nineteen (63%) of the programs that offer diabetes screening do not try to identify "at-risk" persons prior to screening.

Table 20. Written or verbal questionnaire used to identify persons "at-risk" for diabetes (n=30).

Questionnaire	Number	Percent
Yes	9	30.0
No	19	63.3
No Response	2	6.7
Total	30	100.0

Type of Screening Tests Offered

The most commonly specified type of diabetes screening test used by 19 of the local health departments is a random plasma glucose level (63%) (Table 21). NOTE: This number includes the departments which did not specify a test method, but listed an instrument or test product used for random plasma glucose such as Glucometer, Accu-Chek, or Reflotron. Only two of the health departments (7%) indicated they use a fasting blood glucose level to screen for diabetes. One health department indicated they were able to test for Hemoglobin A1c.

Table 21. Tests performed by local health departments offering screening (n=30).

Tests	Number	Percent
Random Plasma Glucose	19	63.3
Fasting Blood Glucose	2	6.7
Hemoglobin A1c	1	3.3
Microalbumin	0	0.0
Test Not Specified	9	30.0

Screening Fee

Only three of the 30 (10%) local health departments that screen for diabetes charge a fee for this service; of these, two reported a nominal charge of \$2.00, and one indicated a fee of \$1.00.

Follow-Up Services

All 30 of the local health departments that offer diabetes screening reported they provide follow-up services if a person screened tests presumptively positive for diabetes (Table 22). All but one of the health departments (97%) make a referral to the person's own family doctor. Another common referral source is a local clinic/hospital (37%).

Table 22. Follow-up services provided for persons who test presumptively positive for diabetes (n=30).

Services	Number	Percent
Patient's Family Doctor	29	96.7
Clinic/Hospital	11	36.7
Specific Physician	1	3.3
No Follow-up	0	0.0
Other	1	3.3

Diabetes Screening Guidelines

Less than half (n=13; 43%) of the health departments that offer diabetes screening indicated they have written guidelines for conducting community screening programs (Table 23). An equal number of health departments reported no written guidelines exist at their facility.

Table 23. Existence of written local health department guidelines for conducting community screening programs in Indiana (n=30).

Have Guidelines	Number	Percent
Yes	13	43.3
No	13	43.3
No Response	4	13.3
Total	30	100.0

SUMMARY

Results of the survey indicated one-third (n=37) of the health departments in the state offer diabetes education and screening programs to the members of their community. Twenty-six health departments that do not offer a community diabetes/education screening program, indicated another organization in their area offered the service. Although demographic reporting is incomplete, results of this survey indicate the at-risk Black and Hispanic populations are not being successfully targeted. Written guidelines for conducting community screening programs should be available in all health departments. Results of this survey indicate only 13 of the 30 local health departments that offer diabetes screening have/follow written guidelines for conducting community diabetes screening programs. State law authorizes local health department to provide insulin to needy citizens at no charge through a process based on the "Application for Insulin and Township Claim." Despite the availability of this program, almost half of the health departments indicated they did not have any person in their jurisdiction receive insulin through this program in the preceding twelve months.

RECOMMENDATIONS

Based on the results of this survey, the following recommendations are made:

- More county health departments should be encouraged to sponsor/implement a diabetes education/screening program, either through their own facility or in cooperation with some other community-based organization in the area.
- All health departments should take steps to target the highest-risk population in their catchment area, with a special effort made toward reaching Hispanic and Black citizens.
- All local health departments, regardless of whether or not a diabetes education/screening program is offered, should know how to access free insulin for needy citizens through the "Application for Insulin and Township Claim."

- All local health departments should have current written guidelines for conducting a community-based diabetes screening program. The Diabetes Control Program will send model guidelines to each local health department once they have been developed..
- All local health departments should be provided with current information addressing the needs expressed by the respondents, beginning with information that can help both the instructor as well as the person with diabetes and their family members, understand the relationship between nutrition and diabetes control.

APPENDIX A

INDIANA STATE DEPARTMENT OF HEALTH DIABETES CONTROL PROGRAM

LOCAL HEALTH DEPARTMENT SURVEY

**INDIANA STATE DEPARTMENT OF HEALTH
DIABETES CONTROL PROGRAM**

LOCAL HEALTH DEPARTMENT SURVEY

DIABETES LOCAL EDUCATION AND SCREENING

NAME OF HEALTH DEPARTMENT: _____
ADDRESS: _____
CITY: _____
STATE AND ZIP CODE: _____
PERSON COMPLETING SURVEY: _____
PHONE: _____ FAX: _____

1. Does your health department have a community diabetes education/screening program targeted at individuals with an increased risk for diabetes?

☐ YES (GO TO QUESTION #2)
☐ NO (GO TO QUESTION #20)

2. Is this program offered in cooperation with another organization?

☐ YES
☐ NO

If yes, what is the name of this organization? _____

3. Estimate the number of hours per month the Health Department staff devotes toward educational/screening initiatives?

a. ☐ <5 b. ☐ 5-10 c. ☐ 11-15 d. ☐ 16-20 e. ☐ >20

4. To whom do you target the education? (Check the appropriate response for each item listed).

Clients with diabetes	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Family members of persons with diabetes	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Minorities	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Elderly (Males and Females 65+)	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Other (Specify) _____	<input type="checkbox"/> YES	<input type="checkbox"/> NO

5. Identify the population you serve. (Enter the approximate annual average number).

Population Served Race/Ethnicity	Number of Individuals		Population Served Age	Number of Individuals	
White (Non-Hispanic)	M	F	Under 18	M	F
Black (Non-Hispanic)	M	F	19-34	M	F
Hispanic	M	F	35-49	M	F
Amer. In./Pacific Islander	M	F	50-64	M	F
Other	M	F	65+	M	F

6. Approximately how many total hours is each education/screening program?

a. ☐ <1 b. ☐ 1-2 c. ☐ 3-4 d. ☐ >4

7. How many persons doing education/screening do you have?
- ☐ Full-time _____
- ☐ Part-time _____
- ☐ Students _____
- ☐ Volunteers _____
8. What is the educational background of the primary instructor?
- a. ☐ Nurse b. ☐ Dietitian c. ☐ Health Educator d. ☐ Other (Specify) _____
9. Is the primary instructor a Certified Diabetes Educator?
- ☐ YES
- ☐ NO
10. What does the educational program include? (Check the appropriate response for each item listed).
- | | | |
|--|------------------------------|-----------------------------|
| a. Risk Factors (i.e. smoking, obesity) | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| b. Symptoms | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| c. Potential complications from diabetes | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| d. Nutrition Management | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| e. Gestational Diabetes | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| f. Exercise | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| g. Terminology | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| h. Self-medication | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| i. Self-glucose Monitoring | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| j. Eye Care | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| k. Oral Health | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| l. Foot Care | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| m. Psychosocial Aspects | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| n. Other (Specify _____) | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
11. What type of educational tools are utilized? (Check all that apply).
- a. ☐ Videos b. ☐ Brochures/Pamphlets c. ☐ Charts/Graphics d. ☐ Books
- e. ☐ Tapes f. ☐ Fact Sheets g. ☐ Other (Specify _____)
12. Who furnishes educational materials you make available to clients? (Check all that apply).
- a. ☐ ADA b. ☐ NIH c. ☐ Develop our own d. ☐ Other (Specify _____)
- e. ☐ Do not furnish educational materials.
13. In what setting(s) do you provide education? (Check the appropriate response for each item listed).
- | | | |
|-------------------------|------------------------------|-----------------------------|
| Health Center | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Hospitals/Clinics | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Schools | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Community organizations | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Home-settings | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Churches | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Worksites | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Other (Specify _____) | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

14. What advertising method(s) do you use to inform the target population(s) about the education/screening program? (Check all that apply).

- | | |
|---|---|
| a. <input type="checkbox"/> Radio/TV PSA | h. <input type="checkbox"/> Press conferences |
| b. <input type="checkbox"/> Bus Advertisements | i. <input type="checkbox"/> Mailings |
| c. <input type="checkbox"/> Billboards | j. <input type="checkbox"/> Health Fairs |
| d. <input type="checkbox"/> Posters | k. <input type="checkbox"/> Community Organizations |
| e. <input type="checkbox"/> Brochures | l. <input type="checkbox"/> Church Announcements |
| f. <input type="checkbox"/> Newspapers | m. <input type="checkbox"/> None |
| g. <input type="checkbox"/> Minority-targeted media | n. <input type="checkbox"/> Other (Specify _____) |

SCREENING

15. Do you offer screening tests for diabetes?

- ☐ YES (GO TO QUESTION #16)
☐ NO (GO TO QUESTION #19)

16. Do you use a written or verbal questionnaire to identify individuals who are "at risk" for diabetes?

- ☐ YES (Please send copy).
☐ NO

17. What screening tests are performed to individuals identified as "high risk"? (Check all that apply).

- a. ☐ Random Plasma Glucose b. ☐ Microalbumin c. ☐ Hemoglobin A1c
d. ☐ Other (Specify _____)

18. Is there a fee for the screening tests?

- ☐ YES
☐ NO

If yes, what is the fee for each test? \$ _____

19. When persons screened tests presumptively positive for diabetes, what follow-up services are provided?

- | | | |
|--|------------------------------|-----------------------------|
| a. Referral to a clinic/hospital | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| b. Referral to patient's family doctor | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| c. Referral to a specific physician
(Specify _____) | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| d. No follow-up offered | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| e. Other (Specify _____) | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

20. Does your Health Center have written guidelines for conducting community screening programs?

- ☐ YES (Please send copy).
☐ NO

21. What is your service catchment area?

- a. ☐ City b. ☐ County c. ☐ Multi-County Region *
- d. ☐ Other (Specify _____)

* If you service a multi-county region, please outline your region on the attached map and indicate the approximate percentage of patients seen in each county (i.e. Marion 90%, Hamilton (10%).

22. Do you know of other facilities or organizations in your area that have a community diabetes education/screening awareness program?

- ☐ YES
☐ NO

If yes, by whom is it offered?

- a. ☐ Clinic/Physician (Name _____)
b. ☐ Community organization (Specify _____)
c. ☐ Hospital (Specify _____)
d. ☐ Other (Specify _____)

23. Approximately how many persons with diabetes in your health jurisdiction were provided insulin through the "Application for Insulin and Township Claim" process in the past 12 months?

- a. ☐ <5 b. ☐ 6-10 c. ☐ Other (Specify _____)

24. Do you have a need for guidance/instruction on:

- a. ☐ Diabetes Screening Practices
b. ☐ Referrals
c. ☐ Educational Methodologies
 1. ☐ Understanding the Different Types of Diabetes
 2. ☐ Nutrition Management
 3. ☐ Using Insulin
 4. ☐ Complications of Diabetes
 5. ☐ Self-monitoring Procedures/Devices
 6. ☐ Other (Specify _____)
d. ☐ Other (Specify _____)

*** Thank you for taking the time to complete this survey. ***

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Diabetes Control Program
Division of Chronic Disease
Indiana State Department of Health
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Indianapolis, IN 46206-1964
(317) 633-6895

APPENDIX B

SUMMARY OF LOCAL HEALTH DEPARTMENT ACTIVITY REGARDING DIABETES EDUCATION/SCREENING AND COMMUNITY SCREENING PROGRAMS

Appendix B

Summary of Local Health Department Activity Regarding Diabetes Education and Community Screening Programs.

Local Health Departments	Education/Screening	Community Screening
Adams		
Allen		
Bartholomew	★	
Benton	★	
Blackford		
Boone	★	
Brown	★	★
Carroll	★	
Cass		
Clark		
Clay		
Clinton		
Crawford	★	★
Davies		★
Dearborn	★	★
Decatur		
DeKalb	★	★
Delaware	★	★
DuBois		
East-Chicago		
Elkhart		
Fayette	★	★
Floyd	★	★
Fountain-Warren		
Franklin	★	★
Fulton		
Gary	★	★
Gibson		
Grant		
Green		

Appendix B, cont.

Local Health Departments	Education/Screening	Community Screening
Hamilton		
Hammond		
Hancock		
Harrison		
Hendricks		
Henry	★	★
Howard	★	★
Huntington		
Jackson		
Jasper		
Jay	★	★
Jefferson		
Jennings		
Johnson	★	★
Knox		
Kosciusko		
LaGrange		
Lake		
LaPorte	★	★
Lawrence	★	★
Madison	★	★
Marion	★	
Marshall	★	
Martin		
Miami		
Monroe	★	
Montgomery		
Morgan		
Newton		
Noble		
Ohio		
Orange		

Local Health Departments	Education/Screening	Community Screening
Owen		
Parke	★	★
Perry	★	★
Pike		
Porter		
Posey		
Pulaski		
Putman		
Randolph	★	★
Ripley	★	★
Rush	★	★
Scott	★	★
Shelby		
Spencer	★	★
Starke	★	★
Steuben	★	★
St. Joseph		
Sullivan		
Switzerland	★	★
Tippecanoe		
Tipton		
Union	★	★
Vanderburgh		
Vermillion		
Vigo	★	★
Wabash		
Warrick		
Washington	★	★
Wayne		
Wells	★	★
White		
Whitley		

APPENDIX C

APPLICATION FOR INSULIN AND TOWNSHIP CLAIM

State Form 687

Township Form 19-1995



APPLICATION FOR INSULIN AND TOWNSHIP CLAIM

State Form 687 (R / 3-95) / Township Form 19-1995

Prescribed by State Board of Accounts, 1995

STATE OF INDIANA
Department of Health

- INSTRUCTIONS:**
1. Indiana Code 16-41-19 authorizes **townships** to supply insulin to its residents in need of insulin treatment who are financially unable to purchase insulin.
 2. **BLANK FORMS** are supplied by the State Department of Health to local health officers who, in turn, supply physicians, on request.
 3. Prepare a separate form for each patient.
 4. **COMPLETED FORMS** go from the provider to the local health officer to the Township Trustee. Local health officers will make a copy or extract information (IC 16-41-19-8), sign the form and **immediately** forward the original to the Township Trustee for payment.
 5. This claim is payable from the Poor Relief Fund not otherwise appropriated, without appropriation. (Indiana Code 16-41-19-7)

Date of application (month, day, year)

APPLICATION (Physician fill in)

Resident of:		Township		County	
Name of patient		Age	Sex	<input type="checkbox"/> Female <input type="checkbox"/> Male	Race
Street address					
City, state, ZIP code					
If patient is child, name of parent or guardian					
Type of insulin	Name of manufacturer		Number of vials	Vial size (ml)	Units (ml)
Physician's Statutory Affirmation: "I solemnly affirm that the free biologicals applied for will be administered to the person named above, and it is my belief after inquiry that the person is financially unable to pay for the biologicals." (IC 16-41-19-4)					
Signature of physician				Telephone number ()	

TOWNSHIP CLAIM (claimant fill in)

Name of claimant (provider)				
Address of claimant (street, city, state, ZIP code)				
DATE PROVIDED	DESCRIPTION OF INSULIN PROVIDED	NUMBER PROVIDED	ITEM PRICE	TOTAL
			\$	\$
			\$	\$
			\$	\$
I certify the foregoing account is just and correct, not in excess of market price, the amount claimed is legally due, after allowing all just credits, and no part of the same has been paid. (IC 5-11-10-1; IC 16-41-19-5; IC 16-41-19-6)				
Signature of claimant / provider			Date signed (month, day, year)	

PATIENT'S RECEIPT

I have received the insulin under "Insulin Provided," above.

Signature patient, parent or guardian	Date signed (month, day, year)
---------------------------------------	--------------------------------

LOCAL HEALTH OFFICER

Reviewed and copy retained.

Signature local health officer or authorized employee	Date signed (month, day, year)
---	--------------------------------

Township Trustee to complete reverse side.

Check or Warrant number
Date approved for payment (month, day, year)
Signature of Trustee
Township

I have examined the within claim and hereby certify as follows:

- ☐ That it is in proper form.
☐ That it is duly authorized as required by law.
☐ That it is based upon statutory authority.
☐ That it is apparently ☐ Correct ☐ Incorrect
 in the sum of \$ _____

Signature of disbursing officer

--

INSULIN CLAIM
(Indiana Code 16-41-19)

Paid to:
Amount
\$
Paid from:

APPENDIX D

LISTING OF HEALTH DEPARTMENTS AND NUMBER OF PERSONS RECEIVING INSULIN THROUGH THE “APPLICATION FOR INSULIN AND TOWNSHIP CLAIM” PROCESS DURING 1995

Appendix D

Listing of Health Departments and Number of Persons Receiving Insuling Through the "Application for Insulin and Township Claim" Proces Form, 1995.

Local Health Departments	None	Less than 5	6-10	No Response
Adams				★
Allen				★
Bartholomew				★
Benton				★
Blackford				★
Boone		★		
Brown		★		
Carroll		★		
Cass				★
Clark				★
Clay		★		
Clinton				★
Crawford		★		
Davies		★		
Dearborn	★			
Decatur				★
DeKalb	★			
Delaware				★
DuBois	★			
East-Chicago				★
Elkhart				★
Fayette		★		
Floyd		★		
Fountain-Warren		★		
Franklin			★	
Fulton				★
Gary				★
Gibson	★			
Grant				★
Green	★			

Appendix D, cont.

Local Health Departments	None	Less than 5	6-10	No Response
Hamilton		★		
Hammond				★
Hancock				★
Harrison	★			
Hendricks			★	
Henry				★
Howard		★		
Huntington	★			
Jackson		★		
Jasper		★		
Jay				★
Jefferson				★
Jennings		★		
Johnson		★		
Knox	★			
Kosciusko				★
LaGrange		★		
Lake	★			
LaPorte				★
Lawrence	★			
Madison		★		
Marion		★		
Marshall				★
Martin		★		
Miami			★ ¹	
Monroe		★		
Montgomery		★		
Morgan		★		
Newton				★
Noble		★		
Ohio		★		
Orange	★			

¹Miami County Health Department stated they had 25 persons with diabetes in their health jurisdiction who were provided insulin through the "Application for Insulin and Township Claim" process in 1995.

Appendix D, cont.

Local Health Departments	None	Less than 5	6-10	No Response
Owen		★		
Parke				★
Perry		★		
Pike	★			
Porter		★		
Posey		★		
Pulaski		★		
Putman				★
Randolph		★		
Ripley		★		
Rush				★
Scott		★		
Shelby				★
Spencer		★		
Starke		★		
Steuben	★			
St. Joseph		★		
Sullivan				★
Switzerland				★
Tippecanoe		★		
Tipton		★		
Union		★		
Vanderburgh				★
Vermillion		★		
Vigo		★		
Wabash				★
Warrick				★
Washington				★
Wayne				★
Wells		★		
White				★
Whitley				★